

## **Chapter 2**

# **Project Description & Alternatives**

## **2.0 PROJECT DESCRIPTION AND ALTERNATIVES**

### **2.1 INTRODUCTION**

This section of the EIAR has been prepared by John Spain Associates, Planning & Development Consultants, and provides a description of the proposed development and also explains the evolution of the scheme design through the reasonable alternatives examined. This chapter of the EIAR was prepared by Luke Wymer, BA, MRUP, Dip. Planning & Environmental Law, Dip PM, Prof. Cert. Environmental Management, MIPI, Associate Director with John Spain Associates, Planning & Development Consultants and reviewed by Paul Turley, BA, MRUP, Dip Environmental & Planning Law, MIPI Executive Director of John Spain Associates. It is also a requirement of the EIA Directive (as amended) to present an outline of the main alternatives considered and a justification of the final proposed development.

A systematic approach in accordance with the Draft Guidelines on the Information to be Contained in EIARs (EPA, 2017), Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Department of Housing, Planning and Local Government, 2018), and other EIA guidance documents was used to ensure all relevant aspects of the development are accurately and fully described. The objective is to provide a description of the proposed development in sufficient detail, which when taken together with the description of the existing environment provided, will allow an independent reader without acquired technical environmental knowledge, to understand the significant impacts likely to arise from the proposed development.

The description of the proposed development is set out in this chapter and the following chapters by each specialist consultant in terms of those environmental topics which will form the basis of the impact assessment process and the characteristics of the proposed development which could potentially affect population, human health, cultural heritage and archaeology, biodiversity, land and soil, water, air quality, climate, noise, vibration, wind, landscape and visual impact, and material assets. The EIA Directive also requires that the description of the site, design, size or scale of the development, considers all relevant phases of the existence of the project from its construction through to its existence and operation.

This EIAR document fully reflects the key environmental factors of the proposed development which were recognised from the scoping carried out by the design team and the level of detail required will vary considerably according to the sensitivity of the existing environment and the potential of the project for significant effects.

### **2.2 SITE LOCATION AND DESCRIPTION**

The site of the proposed strategic housing development has an area of c. 2.56 hectares (including a portion of the site which is in the control of the Planning Authority and for which a letter of consent has been provided) and is bound to the north by the M50 motorway, to the east by Golf Lane, to the west by Glenamuck Road, and to the south by several properties comprising residential dwellings set in large sites. The site was previously occupied by the former residential properties of 'Tintagel', 'Auburn', 'Keelagues', 'Villa Nova', and 'Arda Lodge'. These previous dwellings were demolished by others some time ago, with permission granted to regularise this previous demolition by the planning authority on the 22<sup>nd</sup> of July 2020.

**Figure 2.1: Site Location – Source: Google Maps**



The site itself slopes from south to north, towards the M50 motorway, and accommodates stands of trees and areas of scrub and grassland. The lands are less than 500 metres from the Ballyogan Wood Luas Stop (to the west) and opposite The Park Carrickmines, which is a major mixed-use area comprising office and commercial uses, retail and retail warehousing uses and restaurant / café facilities. The surrounding context of the site includes a mix of residential and commercial uses. A new mixed-use neighbourhood centre, commercial, residential, and leisure scheme has recently been subject to a grant of permission from An Bord Pleanála opposite the subject site at Quadrant 3 in The Park Carrickmines.

The site is located adjacent to the M50 motorway and represents a gateway location which can signal arrival to the built-up area of Dublin. The site is zoned Objective A, '*To protect and-or improve residential amenity*' under the Dún Laoghaire-Rathdown County Development Plan 2016-2022. The surrounding land use is generally residential and is of the same zoning designation as the subject site. The nearby Park and the permitted Quadrant 3, as mentioned, are predominantly office, commercial and retail use and are zoned Objective E '*To provide for economic development and employment*' under the County Development Plan.

As noted within the accompanying social infrastructure audit report prepared by John Spain Associates, the nearby Quadrant 3 development at The Park, Carrickmines to the west will further augment the range of facilities, amenities and uses in the immediate vicinity of the development.

The subject site is identified as an appropriate location for residential development and for higher buildings under the Ballyogan and Environs Local Area Plan 2019-2025.

The nearby Luas stop provides an opportunity to avail of high capacity, high frequency services between Brides Glen to the City Centre and onwards to Broombridge in the north of the city. In light of the site's location within 500

metres of a high capacity urban public transport stop, the site is appropriately classified as an Accessible Urban Location, as defined under paragraph 2.4 of the 2018 Apartment Guidelines. In addition to the proximate Luas stop, the site is also located in close proximity to bus routes operating along Ballyogon Road and Glenamuck Road. The 63 bus route provides services from Dun Laoghaire to Kiltiernan, with c. 20 minute frequencies. Glenamuck Road is well served by existing pedestrian and cycle facilities, with Ballyogon Road also benefiting from good quality facilities.

To the east / southeast of the subject site, on the opposite side of Golf Lane, is an area of existing residential development comprising semi-detached, two and three storey dwellings, with an area of existing apartment development located further to the south.

The subject site occupies a prominent location and is considered to constitute a gateway site into the Carrickmines and Ballyogon area along the M50. The site character and context calls for a landmark architectural design response (as previously identified by An Bord Pleanála- and in the Ballyogon and Environs LAP) to provide for an appropriate proportional framing of adjoining major routes and to acknowledge the prominent location of these lands.



Figure 2.2: Location and context of the subject site

### Site Features

The subject lands fall from south to north towards their boundary with the M50 to the north. A stream follows the edge of the subject site along the western and north-western boundary, before entering a culvert.

The site is a mix of greenfield and brownfield and was previously was occupied by several dwellings. These houses were demolished some years ago by others as noted above, with retention permission recently granted in order to regularise the previous demolition of these houses. The clearance of the site will include the removal of any remaining debris from these previous dwellings which were demolished.

The subject site is currently overgrown in parts, with elements of planting and trees remaining from the gardens of the houses which previously occupied the site.

## Site Access

The site has several existing accesses, associated with the houses which formerly occupied the site, and which have been closed up with temporary hoarding to make the site safe.

There are no footpaths on the western side of Golf Lane at present, however the proposed development will implement a new pedestrian route along this frontage, without prejudicing future road improvement plans. Glenamuck Road to the west of the site is served by footpaths and cycle lanes.

## Local Amenities and Schools

The subject site benefits from ease of access to a wide range of amenities. The site is within close proximity of Leopardstown Valley Neighbourhood Centre, The Park Carrickmines and provides for ease of access to Sandyford and the permitted Cherrywood Town Centre via the adjacent Luas line. The site is also proximate to the Samuel Beckett civic campus and within close proximity of an existing tennis and basketball facility within The Gallops to the northeast.

Section 4.4 of the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (2009) relates to the provision of school spaces with large scale residential development.

A full community and social infrastructure audit report, including an analysis of existing and projected school demand on foot of the proposed development has been prepared and is included as part of the final application to An Bord Pleanála.

## 2.3 PLANNING POLICY CONTEXT

The planning application in respect of the proposed development on the subject lands is subject to national, regional, and local planning policy. The following outlines the key planning documents of relevance to the future development of the subject lands. This section will not address the detailed policies and objectives contained in the various plans which are relevant to the proposed development, as these are addressed in a separate bound Planning Report and Statement of Consistency prepared by John Spain Associates, which accompanies the planning application.

### National Policy

- National Planning Framework - Project Ireland 2040 (2018);
- Urban Development and Building Height Guidelines (2018);
- Sustainable Urban Housing: Design Standards for New Apartments (2018);
- Design Manual for Urban Roads and Streets (2013);
- Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (2009);
- The Urban Design Manual (A Best Practice Guide) (2009);
- Delivering Homes, Sustaining Communities (2008) and the accompanying Best Practice Guidelines - Quality Housing for Sustainable Communities (2007);
- Smarter Travel: A Sustainable Transport Future - A New Transport Policy for Ireland (2009);
- The Planning System and Flood Risk Management – Guidelines for Local Authorities (2009); and
- Architectural Heritage Protection Guidelines for Planning Authorities (2011).

### Regional Policy

- Eastern and Midland Regional Assembly – Regional Spatial & Economic Strategy (RSES), (2018);

### Local Policy

- Dún Laoghaire-Rathdown County Development Plan 2016-2022.
- The Ballyogan and Environs Local Area Plan 2019-2025

The subject lands are zoned Objective A 'To protect and-or improve residential amenity', under which the proposed use is acceptable, pursuant to the land use policies and objectives of the Dún Laoghaire-Rathdown County Development Plan 2016-2022.

## 2.4 ALTERNATIVES EXAMINED

### 2.4.1 Introduction

Article 5 of the EIA Directive (as amended by Directive 2014/52/EU) states that the information provided in an EIAR should include a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the final choice, taking into account the environmental effects.

Accordingly, the presentation and consideration of various alternatives considered by the developer and its project design team is an important requirement of the EIA process. This section of the EIAR document provides an outline of the main alternatives examined throughout the design and consultation process, and This serves to indicate the main reasons for choosing the development proposed, taking into account and providing a comparison the environmental effects. For the purposes of this exercise, alternatives are described at three levels:

- Alternative Locations.
- Alternative Designs.
- Alternative Processes.

The DHPLG 2018 EIA Guidelines state:

*“Reasonable alternatives may relate to matters such as project design, technology, location, size and scale. The type of alternatives will depend on the nature of the project proposed and the characteristics of the receiving environment. For example, some projects may be site specific so the consideration of alternative sites may not be relevant. It is generally sufficient for the developer to provide a broad description of each main alternative studied and the key environmental issues associated with each. A ‘mini- EIA’ is not required for each alternative studied.”*

Pursuant to Section 3.4.1 of the Draft 2017 EPA Guidelines, the consideration of alternatives also needs to be cognisant of the fact that *“in some instances some of the alternatives described below will not be applicable – e.g. there may be no relevant ‘alternative location’...”*

The Draft 2017 EPA Guidelines are also instructive in stating:

*“Analysis of high-level or sectoral strategic alternatives cannot reasonably be expected within a project level EIAR... It should be borne in mind that the amended Directive refers to ‘reasonable alternatives... which are relevant to the proposed project and its specific characteristics’”.*

The key environmental and practical considerations which influenced the design of the proposed development and alternative layouts on the subject lands included the following:

- Consideration of the stream which follows the boundary of the site, and the need to protect and enhance the setting of this watercourse and ensure that no development is at risk of flooding;
- The need to consider the interaction of the proposed development with existing adjacent developments, and the need to preserve the amenity, privacy and security of these properties;
- The need to consider the relationship and integration of the proposed development with the surrounding context while providing for a landmark development of exceptional architectural quality;
- The quality of the urban environment to be delivered and the associated potential impact on human health;

- The need to consider the proposed heights, local streetscape impacts and visual impacts from the surrounding area;
- The requirement for public open space, and the need to differentiate between communal and public;
- Consideration of the loss of trees within the subject site;
- The elevational treatment, massing and scale of the proposed development, which seeks to provide for a landmark on the M50 motorway;
- Access, permeability and connectivity with surrounding areas and land uses.

The following sections of this chapter of the EIAR contains an analysis of the alternative development options for the site, describing design options and changes which were incorporated into the scheme as the proposals progressed. The key considerations and amendments to the design of the scheme, having regard to and comparing the key environmental issues, are set out and discussed.

A ‘*do-nothing*’ scenario is not considered viable or appropriate, having regard to the opportunity to redevelop an underutilised, appropriately zoned site at a landmark, sustainable location adjacent to public transport and excellent road infrastructure. The previous use on the site was residential, albeit at a very low density, and the units that formerly occupied the site have since been demolished. Accordingly, a do-nothing scenario would leave a suitably zoned and located site empty, which is considered to be an inefficient use of the site and contrary to the implementation of the policies and objectives of the national, regional and local planning policy.

## 2.4.2 Alternative Locations

As outlined above, the land-use zoning objective of the subject site in the Dun Laoghaire Rathdown County Development Plan 2016–2022 (“the County Development Plan”) is Objective A ‘To protect and-or improve residential amenity’. The 2018 DHPLG Guidance on the preparation of EIARs notes specifically that the consideration of some types of alternative, such as alternative locations, may not be appropriate in all cases. EIA is concerned with projects and the Environmental Protection Agency’s draft guidelines (2017) state that, in some instances, neither the applicant nor the competent authority can be realistically be expected to examine options that have already been previously determined by a higher authority, such as a national plan or regional programme for infrastructure which are examined by means of a Strategic Environmental Assessment (SEA), the higher tier form of environmental assessment. As the subject site has been identified to accommodate the uses proposed, and the scale of development proposed (it is identified for higher buildings), it is not considered appropriate to evaluate alternate locations in the EIAR.

However, the SEA Environmental Report for the Dun Laoghaire Rathdown County Development Plan considered a range of alternatives in relation to the pattern of development (and in particular residential development) in the county as a whole. The options considered included a restructuring of the current housing pattern to make more efficient use of land and services, with higher density provided at locations such as the subject site. A further option was the progressive / phased zoning of land across the county in response to demographic and market trends. The third option assessed was the delivery of housing and development based on opportunistic market led growth which might not conform to broader planning or environmental imperatives. The selected alternative set out within the SEA was a mixture of the first two alternatives described. The selected alternative was considered to allow for an avoidance of unnecessary greenfield development, enhanced uptake of more sustainable transport modes, and making use of existing services provision.

The proposals contribute positively to the development of the wider area and optimises underutilised land at an appropriate location which is well serviced by infrastructure, transport and local facilities, as further demonstrated in the standalone Social and Community Infrastructure Audit.

The subject site and the surrounding area have the environmental capacity to accommodate the proposed development without any significant risk of impact upon environmental sensitivities due to the site location.

### 2.4.3 Description of Alternative Uses on the site

The subject site is zoned appropriately for residential use, as per the County Development Plan. It is located in close proximity to a broad range of social infrastructure, in addition to the high quality transport infrastructure located nearby. There is already an extensive range of commercial, retail and office activity located in the nearby Park Carrickmines, with further provision in the form of the permitted Quadrant 3 development adjacent. In light of these nearby uses, the sites zoning, previous uses on site and current demand for high quality residential units, it is put forward that other land uses on site would not be considered viable alternatives or would not be in accordance with the planning policy context pertaining to the lands.

In this context, as noted above, the SEA for the Dun Laoghaire Rathdown County Development Plan considered alternate patterns of development for the county. The proposed use of the site is considered to accord with the selected alternative set out within the SEA, in that the proposals represent development at a sustainable density on an accessible, serviced site that is located within the existing built up area.

### 2.4.4 Description of Alternative Designs

This section provides an overview as to how the proposed development has evolved to date by way of consideration of alternative designs and the iterative nature of the proposal now before the Board. Various options were considered as the scheme progressed and key considerations were incorporated into the evolving project design, having regard to the key environmental issues pertaining to the lands.

#### Alternative 1- Previous Strategic Housing Development Application on the Site- Reg. Ref.: PL06D.302336

On 15 August 2018, a planning application in respect of another strategic housing development was submitted to An Bord Pleanála. The then proposed development comprised 250 residential units, along with a childcare facility, gym, resident's amenity space and associated works.

However, on the 16<sup>th</sup> of November 2018, an order to refuse permission was issued by An Bord Pleanála in relation to a previous proposed SHD application on the subject site.

A single reason for refusal was provided by the Board, which is set out in full below, as it provides relevant context and background for the current application:

*“Given the location of the site within the built-up area of Carrickmines, proximate to public transport linkages, to the M50 major transport corridor and to both established and emerging social, retail and employment facilities, it is considered that the proposed design strategy as it relates to height and design does not provide a landmark building which is considered necessary in order to achieve the optimal architectural solution for this strategic gateway site. Furthermore, and notwithstanding the acceptability of the proposed density, it is considered that the overall design of the scheme is monolithic and repetitive and represents an inappropriate design response to the site, given its locational context, which has the capacity to accommodate a building of much greater height and architectural significance than that proposed. Accordingly, the proposed development is considered to be contrary to national policy as set out in the National Planning Framework and section 28 Ministerial Guidance and is considered to be inconsistent with the proper planning and sustainable development of the area.”*

Accordingly, it is evident that the Board's reason for refusal was premises on elements of the overall design of the previous proposal, which was considered not to offer a sufficiently site specific design, with a landmark building. The heights of the development were 4-6 storeys, with limited variation across the site. Indeed, the Board's Inspector, in assessing this previous proposal, noted that the subject site was an appropriate location for compact, dense residential development having regard to its accessibility via public transport and the surrounding development context.



**Figure 2.3: An example of a typical block within the previously refused application**

However, the Inspector raised significant concerns in relation to the height and architectural design of the scheme.

In circumstances where the Board decided to refuse permission for the previously proposed SHD, a design approach similar to that previously refused application was not considered appropriate by the developer and design team and was discounted at the initial design and planning stage.

Rather, and as highlighted by the Board in its refusal of the previous scheme, it was decided that the site would benefit from a landmark architectural approach and the inclusion of monolithic, whilst repetitive development would give rise to negative landscape and visual amenity impacts on the surrounding area.

#### Alternative 2 – Previously Permitted Residential Development - Reg. Ref.: D06A/1157

Permission was granted for proposed development comprising 4 houses and 121 apartments with 3 blocks of 5-6 storeys over basement car parking (site area of 1.25ha).

The development included inter alia the following:

*“Demolition of the existing two no. dwellings at Tintagel and Auburn as well as the two no. dwellings at Keelogues ; Demolition of all outbuildings within the site: one existing dwelling at Creagan to be maintained on site ; 4 no. new detached dwellings; as follows; - house type 1, a two storey five bedroom dwelling of 254 sq.m with 2 no. car parking spaces, house type 2, a two storey three bedroom dwelling of 110 sq.m, including balconies at first floor level on its western and eastern elevation, with 2 no. car parking spaces. house type 4, a two storey five bed roomed dwelling of 254 sq.m with 2 no. car parking spaces. house type 5, a five bedroom dormer bungalow of 257 sq.m, including balconies at first floor level on its southern and northern elevation, with 2 no. car parking spaces, 121 no. apartments units comprising of 3 no. apartment blocks consisting of 29 no. 1 - bed units), 68 no. 2 bed units, 8 no. 3 bed units; 3 no. 2 - bed duplex units, as well as 13 no. 3 - bed duplex units.”*

However, the design approach adopted in respect of this previously permitted scheme would have resulted in an underutilisation of the subject site and failed to recognise and adequately respond to the site context, including the material assets serving the subject site. Such an approach would have been suboptimal in terms of population and human health, as the subject site represents an opportunity to focus population growth and residential delivery at a location that is particularly well-served by public transport and other amenities, thereby reducing reliance on private motor vehicles, and encouraging more sustainable travel patterns for a greater number of people. On this basis, this alternate design option was discounted at the initial design and planning stage of the current proposals.

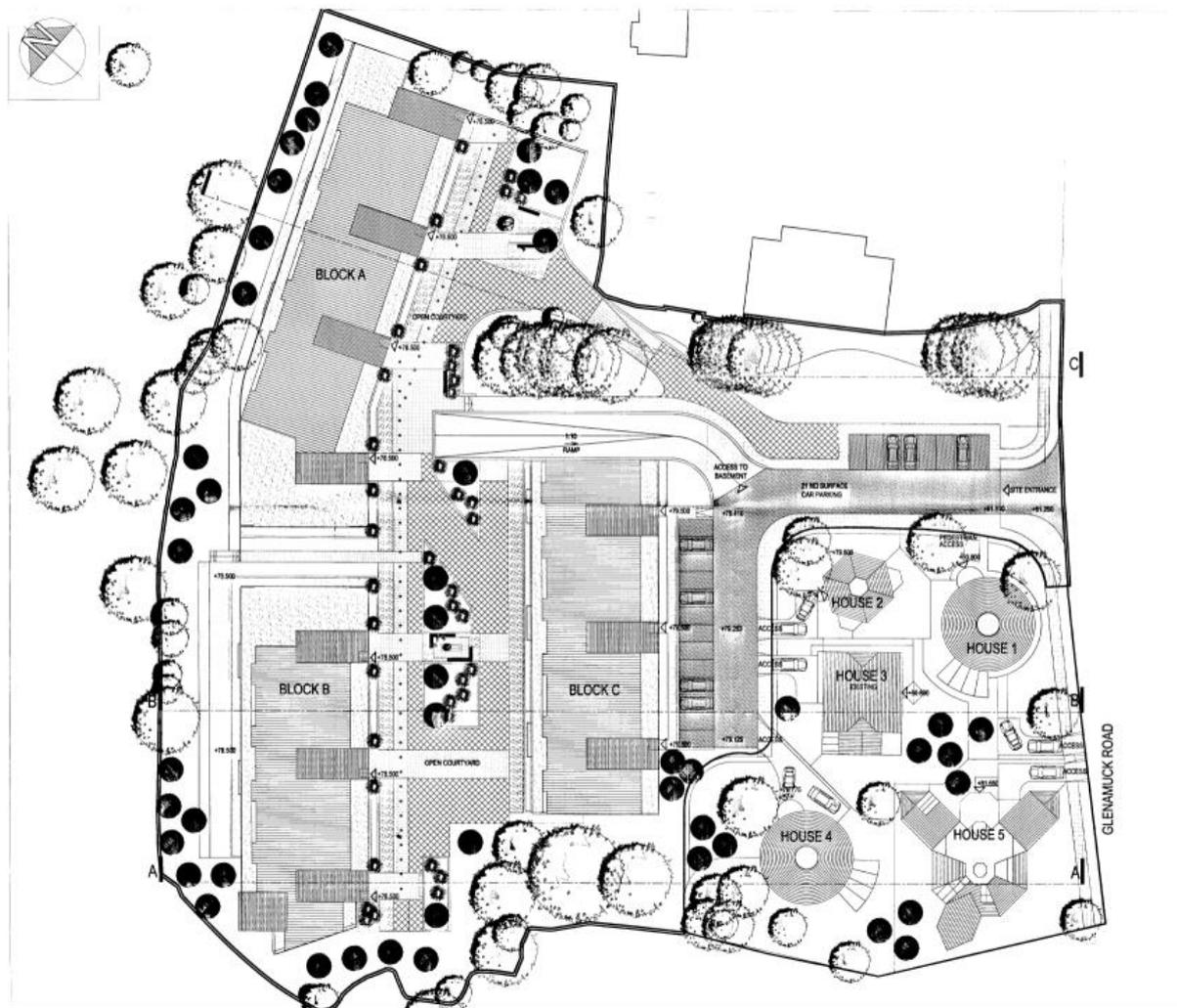


Figure 2.4: Extract from site plan of Reg. Ref.: D06A/1157

Alternative 3 – Scheme Submitted for Pre-Application Consultation with An Bord Pleanála

A request to enter into pre-application consultations was submitted to the Board in March 2020. The scheme as submitted to the Board for consultation comprised the following:

*“The proposed development comprises a residential development of 489 no. units (all apartments), along with ancillary residential amenities, and provision of a childcare facility, gym, and local shop.*

*The proposed development is set out in 7 no. blocks which comprise the following:*

- *Block A1 comprises 62. no. apartments within a part four, part six storey building, including 10 no. studio units, 7 no. 1-bedroom units, 41 no. 2 bedroom units, and 4 no. 3-bedroom units. An ESB substation is provided at ground floor level.*
- *Block A2 comprises 85 no. apartments within a part four, part eight storey building, including 22 no. 1-bedroom units, 49 no. 2-bedroom units, and 14 no. 3-bedroom units.*
- *Block A3 comprises 79 no. apartments within a part four, part twelve storey building, including 21 no. studio units, 19 no. 1-bedroom units, 28 no. 2-bedroom units, and 11 no. 3-bedroom units.*
- *Block B comprises 150 no. apartments and resident’s amenities within a part four, part eighteen, part twenty-one and part twenty-two storey building. The apartments include 76 no. 1-bedroom*

*units, 68 no. 2-bedroom units, 4 no. 3-bedroom units, and 2 no. duplex units. An ESB substation, concierge area and resident's amenity space are provided at ground floor level.*

- *Block B1 comprises 8 no. apartments and is four storeys in height, directly abutting Block B. The apartments include 4 no. 1-bedroom units, and 4 no. 2-bedroom units.*
- *Block C comprises 45 no. apartments and a local shop within a part five, part seven storey building. The apartments include 36 no. 1-bedroom units, 4 no. 2-bedroom units, and 5 no. 3-bedroom units. A local shop and an ESB substation are provided at ground floor level.*
- *Block D comprises 60 no. apartments, a commercial gym, and a childcare facility in a part four, part seven storey building. The apartments include 24 no. 1-bedroom units, and 36 no. 2-bedroom units. The commercial gym and childcare facility units are located at ground floor level.*

*Two basement levels are proposed, providing car parking spaces (310 no.), bin stores, plant rooms, bicycle parking, and circulation areas.*

*The proposed development includes landscaping, public, private and communal open space, a new pedestrian and cycle bridge over the stream at the western side of the site with a new pedestrian cycle crossing of Glenamuck Road South, cycle and pedestrian facilities, bicycle parking, play facilities, and lighting. The proposed buildings include the provision of private open space in the form of balconies and winter gardens to all elevations.*

*The development also includes vehicular, pedestrian, and cycle accesses, drop off areas, boundary treatments, services, and all associated ancillary and site development works.”*

The proposals were subject to a tripartite meeting with the Planning Authority and An Bord Pleanála and the Planning Authority and the Board also each prepared a report on the proposals. A range of issues were discussed at the meeting and within these reports and the Board's Opinion, including the following key environmental matters:

- the development would require a detailed tree survey and impact report, including measures to retain worthy trees on site where possible;
- need to include measures to deal with inward noise to ensure that the proposed residential units would provide for a good standard of amenity was highlighted;
- need to carry out detailed sunlight and daylight analysis was highlighted;
- additional details were sought in relation to the initial wind analysis carried out, which at the time of the pre-application submission indicated that the ground floor open spaces within the scheme might not be suitable for sitting.

The applicant and design team reviewed the responses received from the Planning Authority and the Board and developed the scheme further to take account of the issues raised during the course of pre-application consultations.



**Figure 2.5: Extract from site layout plan submitted for pre-application consultation**

#### **Alternative 4 – Preferred Option**

The preferred option is the scheme now being proposed for permission on the subject site, and has been informed by a consideration of the above-mentioned alternative schemes on site, in addition to the comments received at pre-application stage from the Planning Board and the Planning Authority.

The Opinion issued by An Bord Pleanála at the end of the pre-application consultation process on 31 July 2020 identified nine items of specific information which should be included in any final SHD application for the proposed development. The standalone Statement of Response report prepared by John Spain Associates, which accompanies this full application, provides a concise response to each of these items of specific information, and identifies the relevant documents in the application documentation where the individual issues raised are addressed in detail.

Having carefully considered all relevant factors, the number of proposed units has decreased marginally, from 489 to 482. Moreover, it should be noted that:

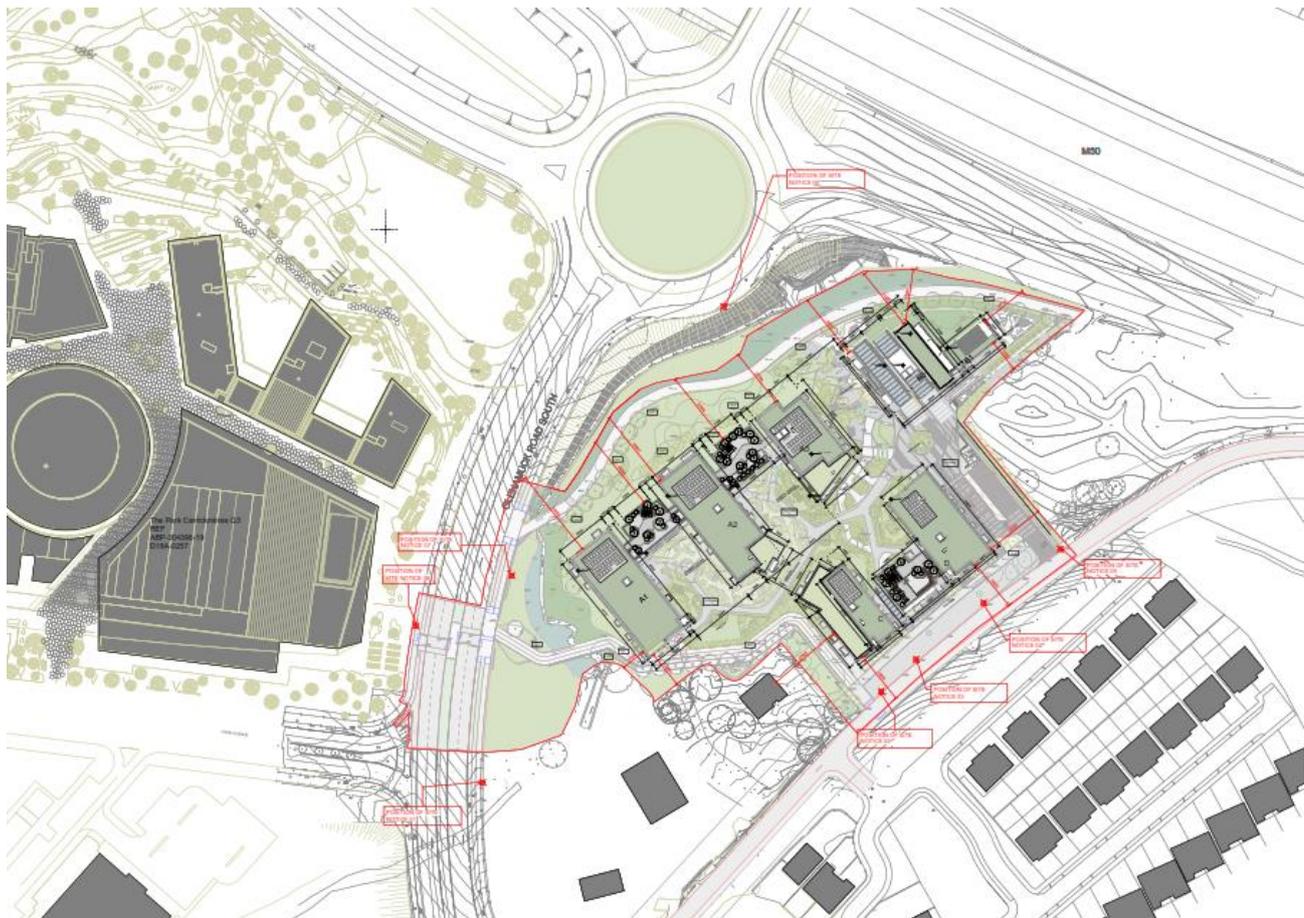
The key issues from an environmental perspective which influenced the final iteration of the proposed development included:

- detailed sunlight and daylight assessment prepared by IES. As part of the design process since the pre-application submission to the Board, the internal layout and design of units within the development has been altered to ensure sunlight and daylight are maximised. This will result in a positive impact on human health *vis a vis* the previous design alternative;
- wind modelling and assessment exercises. This has involved the modelling of wind conditions on site to assess the safety and quality of outdoor spaces. Where issues were identified with the comfort or safety of these areas, design based mitigation was implemented in the form of planting, landscaping, or shelters

within the open spaces, in order to ensure a significant improvement in microclimate impacts when compared to the previous design alternative;

- more detailed arboricultural assessment, which has more accurately identified and categorised the existing trees on site. The landscape scheme now reflects a more realistic and definitive proposal in terms of tree retention. Measures to ensure trees which are identified for retention can be protected during the construction of the development have been identified within the arborist's report.
- The development has been subject to a detailed inward noise assessment due to its proximity to the M50 motorway. As set out within the Noise and Vibration chapter of this EIAR, design based mitigation has been incorporated to ensure a good level of amenity is maintained.
- The design of the main east-west cycle and pedestrian route through the site has been considered in further detail and the surrounding landscaping context has been improved to enhance the usability and attractiveness of the route. Clear entry points to the site from Glenamuck Road have been incorporated to ensure that the entrances to the site for pedestrians and cyclists will be clearly identifiable. These design updates have improved the design of the scheme in terms of cycling and walking connectivity, which represents an improvement in terms of population and human health and material assets when compared to the previous design alternative.
- The final application now includes lands in the ownership of Dun Laoghaire Rathdown County Council within the application site boundary. The lands are subject to a letter of consent from the Local Authority. The works included on these lands include a new pedestrian crossing of Glenamuck Road, and new pedestrian and cycle infrastructure along the western and northern boundaries of the subject site, making provision for future connectivity beyond the subject site to the east.

In summary, the design of the proposed development takes into account all environmental issues raised in respect to previous design alternatives and provides for a development that has been optimised to amplify positive environmental effects whilst reducing negative environmental impacts wherever possible. The final proposed scheme also responds to the characteristics and constraints of the subject site vis a vis the previous iterations of the scheme and the alternative layouts considered.



**Figure 2.5: Extract from final proposed site layout**

#### 2.4.4 Description of Alternative Processes and Technologies

The relevance of alternative processes and technologies is limited in the case of this EIAR having regard to the nature of the proposed development, which is primarily for a residential development. The Energy and Sustainability Statement prepared by JAK Consulting Engineers confirms that the proposed development incorporates thermal performance windows, doors and glazing. The building fabric has been selected to meet the requirements of Part L building Regulations and NZEB. The incorporation of these elements and technologies into the scheme will ensure higher performance and improved building sustainability when compared to out-dated, less energy efficient materials and technologies.

### 2.5 PROJECT DESCRIPTION

The proposed development comprises a residential development of 482 no. units (all apartments), along with ancillary residential amenities, and provision of a childcare facility, gym, and local shop. The proposed residential units comprise 31 no. studio units, 183 no. 1-bedroom units, 229 no. 2-bedroom units, and 39 no. 3-bedroom units (including 2 no. duplex type units).

The proposed development is set out in 7 no. blocks which comprise the following:

- Block A1 comprises 62. no, apartments within a part four, part six storey building, including 10 no. studio units, 7 no. 1-bedroom units, 41 no. 2 bedroom units, and 4 no. 3-bedroom units. An ESB substation is provided at ground floor level.
- Block A2 comprises 85 no. apartments within a part four, part eight storey building, including 25 no. 1-bedroom units, 45 no. 2-bedroom units, and 15 no. 3-bedroom units.

- Block A3 comprises 79 no. apartments within a part four, part twelve storey building, including 21 no. studio units, 19 no. 1-bedroom units, 28 no. 2-bedroom units, and 11 no. 3-bedroom units.
- Block B0 comprises 150 no. apartments and resident's amenities within a part four, part eighteen, part twenty-one and part twenty-two storey building. The apartments include 76 no. 1-bedroom units, 68 no. 2-bedroom units, and 6 no. 3-bedroom units (including 2 no. duplex type units). An ESB substation, resident's concierge area and amenity space (171 sq.m) are provided at ground floor level. A further resident's amenity / event space is provided at the twentieth and twenty-first floor levels (83 sq.m).
- Block B1 comprises 8 no. apartments and is four storeys in height, directly abutting Block B. The apartments include 4 no. 1-bedroom units, and 4 no. 2-bedroom units.
- Block C comprises 42 no. apartments and a local shop within a part five, part seven storey building. The apartments include 30 no. 1-bedroom units, 9 no. 2-bedroom units, and 3 no. 3-bedroom units. A local shop (154 sq.m) and an ESB substation are provided at ground floor level.
- Block D comprises 56 no. apartments, a commercial gym, resident's concierge area, resident's lounge, and a childcare facility in a part four, part seven storey building. The apartments include 22 no. 1-bedroom units, and 34 no. 2-bedroom units. The resident's concierge area (99 sq.m), commercial gym (340 sq.m), and childcare facility (300 sq.m) units are located at ground floor level. The resident's lounge (292 sq.m) is located at first floor level.

Two basement levels are proposed, providing car parking spaces (299 no.), bin stores, plant rooms, bicycle parking (1,000 no. spaces), and circulation areas. A further 240 no. bicycle parking spaces and 4 no. car parking spaces are provided at ground level. The proposed development includes landscaping, boundary treatments, public, private and communal open space (including roof terraces), two cycle / pedestrian crossings over the stream at the western side of the site, along with a new pedestrian and cycle crossing of Glenamuck Road South at the west of the site, cycle and pedestrian facilities, play facilities, and lighting. The proposed buildings include the provision of private open space in the form of balconies and winter gardens to all elevations of the proposed buildings. The development also includes vehicular, pedestrian, and cycle accesses, drop off areas, boundary treatments, services, and all associated ancillary and site development works.

Part of the site (along Golf Lane) falls within the area of the Cherrywood Strategic Development Zone (SDZ) which is subject to the Cherrywood SDZ Planning Scheme 2014, as amended. The proposed public realm, landscaping and interface with Golf Lane has been designed to set back development and avoid prejudicing future road proposals at this location under the SDZ Planning Scheme (the Kilternan Link Road).

The proposed development comprises a residential element of 482 apartments along with associated residents' amenities and support facilities, a childcare facility, a gym, a neighbourhood shop, and public, communal and private open spaces. The scheme is set out over 7 blocks (among which blocks A 1-3 and B/B1 are conjoined), which present strong frontages to the surrounding streets and internal site areas, allowing for a series of generous courtyards within the internal portion of the site.

The heights of the proposed buildings graduate upward from a lower element of six storeys to the southwest (Block A1), stepping upward to eight and then twelve storeys in blocks A2 and A3 respectively. Each of these elements of the overall Block A are interlinked with 4 storey connecting elements, which unify the frontage of the overall block, with the main block elements orientated along an east – west axis so as to present a slender profile to the roadway to the west, whilst creating visual interest via the stepping up and down of heights across block.

Further to the north of Block A, Block B0 is a landmark architectural element. This building presents as a slender built form which steps up to a maximum height of 22 storeys toward the M50 motorway. The stepping in the height of this building maximises the slenderness of its appearance, avoiding an overly bulky presence, while allowing for the delivery of an instantly recognisable landmark building along the important route to the north of the subject site, assisting with wayfinding both along the M50 and within the area surrounding the development. Block B1 steps out from the frontage of Block B0, towards the M50 to the north, providing for a modulating of the scale of the development at lower levels.

Blocks C and D are located in the eastern portion of the site, and comprise of four and seven storey elements, with a neighbourhood shop located at ground floor level of block C, on the eastern side of the building in order to activate the adjoining public realm, while providing an important local facility for the proposed development and the immediately adjoining residential areas. Block D includes a commercial gym element at ground floor level, and a childcare facility. These elements also provide activation of the building frontage and the public realm, turning the corner of the building to provide activity and passive surveillance at the main vehicular entrance to the site and onto the internal communal open spaces.

## **2.6 CHARACTERISTICS OF THE PROJECT**

The description of the development (as set out in the Project Description section above) comprises the following key characteristics of the project of most relevance to the EIA, which should be read in conjunction with all accompanying application documents and reports. In addition, each chapter of the EIAR includes details of the characteristics of the project of most relevance to that particular aspect of the environmental assessment.

### **Site Area**

The site area of the proposed development is 2.56 ha. A portion of this area is under the ownership of DLR County Council, the Local Authority. A letter of consent has been provided for this portion of the site within the application documentation.

### **Layout**

As is evident from the application documentation, the site layout has evolved following consideration of key site features, constraints and opportunities, including land use zonings, planning policy objectives, site topography, mature trees, surrounding land uses and access. The final layout also provides for enhanced legibility of the proposed pedestrian / cycle routes, promoting connectivity and permeability through the site, with an easily identifiable and welcoming entrance provided from Glenamuck Road.

The interior of the subject site provides for a series of protected public and communal spaces, which will benefit from passive surveillance from the residential, residential amenities, and commercial uses within the scheme.

The layout provides for taller buildings towards the north of the site, in proximity to the M50 corridor, in accordance with the requirement for a landmark building at that location, with scale reducing towards the southern end of the site, responding sensitively to the prevailing context and ensuring a good level of separation from adjacent properties to the subject site.

The layout ensures permeability through the development with a range of route options available to cyclists and pedestrians, both around the perimeter of the scheme, and within the centre of the site, linking existing communities to the east and southeast with the existing retail / commercial / café and restaurant facilities in The Park, and the permitted neighbourhood centre mixed use development at Quadrant 3 in The Park, Carrickmines.

The location of ancillary residential amenities and of the commercial elements within the scheme has been carefully considered, with such uses distributed between blocks, ensuring maximum activation of the routes and spaces within the overall development.

The access arrangements for the development favour cyclists and pedestrians, with regular vehicular access restricted to a small portion of the site, allowing for general access, deliveries, creche drop-off, and access to the underground car park. The scheme provides generous spaces for people to pass through on

Within the main central spine of the site, with its paved pathways set between areas of high-quality landscaping, no vehicular access will be allowed, save for emergency access. Regular vehicular access will be filtered out of this area.

The layout of the scheme respects the future road objective to the east / south east of the site as set out in the Cherrywood SDZ Planning Scheme, ensuring that the development will not prejudice the future delivery of important road infrastructure.

## **Residential Units**

The proposed development includes 482 residential units in total, all of which are apartments. The proposed unit mix breakdown is as follows:

- 31 no. studio units (6%)
- 183 no. one bed units (38%)
- 229 no. two bed (4 person) units (48%)
- 39 no. three bed units (8%) (includes 2 no. 3-bed duplex units)

The majority of the residential units proposed will exceed the minimum standards for unit areas set out within the 2018 Apartment Guidelines by 10% or more. The generous size of these apartments, in addition to their high-quality materiality, considered internal layout, and access to good quality private and communal open space will ensure an excellent level of residential amenity within the scheme for a range of occupants – importantly to include families.

The layout and orientation of the blocks themselves seek to maximise privacy within the residential units, with the placement and orientation of fenestration and private balconies and winter gardens also playing an important role in this regard. Meanwhile, the scheme seeks to maximise ‘eyes on the street’ or passive overlooking of internal routes and open spaces, and adjoining streets, thereby providing for a sense of security and safety for occupants and passers-by. The enclosure provided by taller built elements will also assist with this feeling of security throughout the development.

As is set out in further detail below, the residential units within the scheme has been designed so as to accord with, and in many cases exceed, the standards set out within the 2018 Apartment Guidelines (the Specific Planning Policy Requirements of which supersede any conflicting standards set out in the County Development Plan). The HQA prepared by HJL Architects demonstrates quantitative compliance with these standards

## **Landscaping and Open Space**

A detailed and comprehensive landscape design for the proposed development has been prepared by Cameo Landscape Architects and a full-scale landscape masterplan and detailed landscape drawings accompanies this cover letter.

The landscape design has been predicated on the layout of the scheme, which creates a range of different spaces and routes within the site, including a pedestrian and cycle route around the perimeter of the site, the location and design of which steps back from and respects the stream which flows through the site, which will be safeguarded by a broad riparian corridor, with supplemental planting to be provided, including watermeadow planting in the vicinity of the new bridge, which will carry the pedestrian and cycle way across the stream to link in with the greenway to be delivered from The Park Carrickmines to Clay Farm, via the park to be delivered on the former Ballyogan Landfill Site (Jamestown Park).

An area of hard landscaping with a water feature and specimen tree planting is provided between Blocks D and B1, which provides for a shared surface podium space, allowing for pick up and drop off from the Creche, and drop off

to the apartment buildings at ground floor level (as opposed to the main access route to the residential units via the basement car pack, with lift and stair cores).

From this podium plaza area, a series of landscaped terraces step down towards the stream between blocks A3 and B0, providing access to the perimeter pedestrian and cycle route.

Adjacent to Block B0 to the north and west are a series of informal open spaces, and a play area associated with the creche.

Elsewhere within the scheme, play facilities are provided primarily via 'play on the way' features, which are provided along the main internal spine of the development, allowing for multiple opportunities for play which integrate effectively with the wider landscape design.

This central area of the scheme features broad landscaped areas, with adjacent areas of soft landscaping, a main lawn space, social seating areas, and a significant level of tree planting. The landscape scheme also provides for buffer zones around the site boundary, where additional planting will bolster the existing tree and plant screening to boundaries with adjoining properties, helping to ensure that the amenity of surrounding dwellings are maintained.

### **Ancillary Residents' Amenities**

Notwithstanding the fact that the proposed development does not seek to rely on any of the derogations available to purpose built 'Build to Rent' developments, the current proposal still incorporates a range of resident's facilities and amenities, which will augment the high standard of amenity delivered in the residential units themselves.

Residents amenities are focused in Block B0 and Block D. Within Block B0, a concierge / lounge area is provided at ground floor level (comprising 105 sq.m). A further multi-purpose amenity room is also provided at ground floor (62 sq.m). Further to these, a key resident's amenity is provided at the top of this landmark building, comprising an event space set out over two levels (GFA of 82 sq.m), which will benefit from panoramic views of the surrounding area, including Dublin Bay and the Dublin and Wicklow Mountains.

Within Block D, a concierge area is provided at ground floor level, adjacent to the commercial gym and childcare facility. The concierge area has a floor area of c. 99 sq.m. At first floor level, a large multipurpose resident's amenity room is provided with a gross floor area of 292 sq.m. The room will provide for flexible uses, including home working, events, and exercise.

When combined with the generous size of the residential units themselves, the bespoke architectural design of the development, the high quality landscape scheme proposed (discussed further below), and the location of the scheme in close proximity to facilities, amenities, and public transport, it is submitted that the result is a scheme which delivers best-in-class levels of amenity, which will enhance the living experience of future residents and benefit the wider area also.

### **Proposed Non-Residential Uses**

The proposed development incorporates small scale commercial uses – namely a childcare facility and a commercial gym (located in Block D) and a retail unit to accommodate a local shop (which is located in Block C).

The inclusion of a childcare facility, which is intended to comprise a floor area of c. 300 sq.m, has regard to the requirements of the 2001 guidelines pertaining to childcare facilities, and to the requirements regarding childcare facilities set out within the Ballyogan and Environs LAP, whilst taking cognisance of the significant level of existing provision in the area as described further below. The childcare facility has been designed and sized to accommodate the full likely childcare demand for the development (c. 72 places). The size of the facility has been

increased since the pre-application submission to meet this requirement. The social infrastructure audit report submitted herewith provides further detail.

The inclusion of a small local retail unit within the scheme is considered appropriate having regard to the scale of the proposed development, the pattern of existing adjoining development, and the benefits which the inclusion of a retail unit could engender in terms of community building and the activation of the public realm within the scheme and on adjoining routes. The inclusion of this use will also serve to reduce trip generation from the proposed development, as essential items will be available to purchase on the doorstep of the significant number of residential units within the scheme and in surrounding developments off Golf Lane. The inclusion of such a minor local shop will have no material impact on the primacy and success of the nearby permitted neighbourhood centre development at Quadrant 3, The Park.

## **Access and Connections**

The main vehicular access to the subject site is to the basement car park area, with an entrance and ramp provided off Golf Lane on the eastern side of the subject site. An access is also provided here to the podium plaza area, which includes a shared surface allowing for pick-up and drop-off associated with the ancillary residents' amenities, creche, and residential units. The access arrangements are designed to be compatible with the future delivery of the Kiltarnan link road which will replace Golf Lane in due course, as provided for under the Cherrywood SDZ Planning Scheme.

The proposed development is also highly accessible via bike and on foot, given the strong connections and new infrastructure provided for within the scheme. The site is proximate to high quality, high capacity public transport infrastructure as noted previously.

The proposed development includes the provision of new routes crossing the stream along the site's western boundary, linking the new pedestrian and cycle infrastructure encircling the scheme with the Glenamuck Road and the facilities thereon, and also to The Park, via a new crossing. These works are on lands in the ownership of the Local Authority for which a letter of consent has been provided for the inclusion of the lands within the application site.

## **Parking**

Given the highly accessible location of the subject site (as set out within the DBFL Consulting Engineers input within the accompanying TTA), it is intended to provide for car parking at a rate below the maximum standards set out within the County Development Plan. The proposals include 299 car parking spaces at basement level, along with a further 4 spaces for set-down or taxi use at surface level. 10 of these spaces will be allocated to the non-residential elements of the proposed development. This equates to a ratio of c. 0.6 spaces per residential unit. The parking provision includes 7 no. spaces to be operated by a car sharing company. 12 no. motorcycle parking spaces are also provided.

The level of parking proposed is considered appropriate having regard to the site's highly accessible location in close proximity to a Luas stop and other public transport services.

The TTA submitted herewith includes a full car parking analysis, including a strong evidence base predicated on parking demand surveys and analysis of census data on car ownership patterns.

1,000 cycle parking spaces are provided at Basement -1 level, while 240 cycle spaces will be provided at basement level. This level of provision will exceed the minimum standards set out within the DLR cycle manual document, and meets the requirements of the 2018 Apartment Guidelines.

## Plot Ratio and Site Coverage

The proposed development results in a plot ratio of c. 1.65 and a site coverage level of c. 20%, based on the site area of c. 2.56 hectares. When only the developable / net site area is considered, the plot ratio is c. 2.2 and the site coverage is c. 27%.

## Apartments Guidelines

All apartments comply with *Sustainable Urban Housing: Design Standards for New Apartments — Guidelines for Planning Authorities* 2018. The apartments within the proposed development are not Build-To-Rent and as such conform to the guidelines and requirements for standard residential apartments. All units meet or exceed minimum standards and 51% of units are Dual Aspect, with a minimisation of exclusively north facing units. The Housing Quality Assessment prepared by HJL Architects lodged with the planning application for the proposed development provides further detail.

## Residential Density

The net residential density of the proposed development will be c. 268 units per hectare, which is based upon the total developable site area of c. 1.8 hectares and a total of 482 no. residential units. The gross residential density of the proposed development, when incorporating the full site extent of c. 2.56 hectares, will be c. 188 units per hectare. This difference reflects the nature of the development site and that a large portion of the redline site area is to be given over to facilitating public infrastructure improvements, particularly cycleways and pedestrian walkways, and the portion of the site under control of the Local Authority. The proposed density makes use of the available area on site, allowing a high level of sustainable density.

## Building Heights

The proposed development responds to the comments from the Planning Authority identifying the site as being suitable for a landmark building of increased height, which in turn allows for increased density on site, as outlined in the density section previous.

Building heights range from part 4 storey to a maximum of 22 storeys over basement level:

- Block A1: Part 4 to part 6 Storey
- Block A2: Part 4 to part 8 Storey
- Block A3: Part 4 to part 12 Storey
- Block B0: Part 4 to part 22 Storey
- Block B1: 4 Storey
- Block C: Part 5 to part 7 Storey
- Block D: Part 4 to Part 7 Storey

The maximum height of the buildings have regard to the policies, objectives and guidance set out in the *National Planning Framework and the Urban Development and Building Height Guidelines 2018*, which places much greater emphasis on delivering compact growth including through the provision of greater building heights. A Material Contravention Statement, prepared by John Spain Associates, includes a focus on the proposed building heights, demonstrating how the heights proposed for the subject site meet the criteria set down under SPPR1 of the 2018 Apartment Guidelines and SPPR3 of the Building Height Guidelines 2018, with details of further compliance with national guidance on building heights, which supersede The DLR County Development Plan 2016-2022.

## Transport and Road Works

Vehicular access to the development is to be provided via Golf Lane. There are a number of existing entrances on site, that are presently redundant, which are to be blocked for the construction phase. There are no footpaths on the western side of Golf Lane at present, however the proposed development will implement a new pedestrian route along this frontage.

Golf Lane itself, there is a linear stretch of land which falls within the boundary of the Cherrywood Strategic Development Zone (SDZ). There is an objective under the Planning Scheme to provide an upgraded link road along Golf Lane adjacent to the subject site (the Kilternan Link Road). The proposed scheme has been designed to cater for the future delivery of this link road, with setbacks incorporated into the design to allow for this future road development and upgrade to not be negatively affected by the proposal.

Further details are set out in the Traffic and Transport Assessment prepared by DBFL Consulting Engineers. The TTA sets out details of the transportation context and characteristics of the subject site and the surrounding area, assesses the baseline traffic conditions, quantifies the impact of the proposed development on these conditions, and addresses the level of cycle and car parking provided within the proposed development. The TTA also analyses the internal access arrangements within the proposed development.

## Delivery and Service Arrangements

The internal layout of the development allows both development servicing (such as deliveries) and waste collection to be conducted within the development itself, thereby avoiding the obstruction of either vehicular or pedestrian traffic on Golf Lane. Access arrangements for the development favour cyclists and pedestrians, while allowing for general access, deliveries, creche drop-off, and access to the underground car park.

The proposed development is not expected to generate significant quantities of waste during its operation, and the majority of waste generated is expected to comprise typical municipal waste streams. Further details are set out in the Operational Waste Management Plan prepared by AWN Consulting.

## 2.7 PRINCIPAL ELEMENTS OF THE PROJECT

### 2.7.1 Introduction

The purpose of this section is to provide a description of the principal elements of the proposed development during construction and operation (and decommissioning if applicable). These include the following:

- Construction Stage (Land Use Requirements, Construction Activity & Significant Effects).
- Operation Stage (Processes, Activities, Materials Used).
- Changes to the Project.
- Secondary and Off-Site Developments.

### 2.7.2 Description of Construction Stage

This section of the EIAR summarises the construction and phasing of the proposed development and summarises the measures to be taken to ensure that the impact of construction activity is minimised. The *Construction and Environmental Management Plan*, which is included as a standalone report with this application, should be referred to for a more detailed assessment of the construction and indicative phasing proposals for this development. There is no demolition taking place on site.

## Construction Stage

The construction of the development is anticipated to take place over a c. 24-month period approximately. The development is proposed to be constructed on the following basis:

- Site Setup;
- Site clearance;
- Earthworks, including cut and fill and disposal of excess material off site;
- Construction of substructure;
- Super Structure Frame to buildings in sequence;
- Roof and Façade finishes;
- Internal fit out;
- External site works and tie in to Golf Lane.

## Construction Activities

The Construction and Environmental Management Plan [CEMP], prepared by DBFL Consulting Engineers, sets out the provisions for the construction phase of the proposed development. The main construction activities pertaining to traffic generation relate to the excavation stage when soil is removed off site, transporting constructing materials to the site, and concrete transport to build to site superstructure. In general, the stages of construction activity on site can be broken down as follows:

- Site Set Up: Set up site perimeter hoarding, maintaining existing pedestrian and traffic routes around the site.
- Removal of Services: Prior to any works a utility survey shall be carried out to identify existing services. All services on site shall be disconnected, diverted or removed as agreed with service providers;
- Clearance: Site Clearance and removal of undergrowth and debris on site to make it ready for the commencement of enabling works;
- Excavation and Enabling Works: This includes a bulk excavation and removal of material when forming the basement;
- Site Service Installations: Drainage, power, water and the like shall be installed to serve the proposed development;
- Substructure: the development consists of a two-level parking lower ground / basement under the residential buildings on the site. The foundation for the basement consist of reinforced concrete pad foundations to load bearing columns and strip foundations to load bearing walls all bearing directly onto bedrock;
- Superstructure: The construction of the superstructure shall involve complex sequencing of activities. The form of construction of the buildings are subject to detailed design, but may include a reinforced concrete frames system with a reinforced concrete flat slab and concrete loadbearing columns and walls with stability provided by shear and core walls.

## Geotechnical Investigation

The ground conditions are described in further detail in Chapter 7 Land and Soils and Chapter 8 Water.

## Potential Impacts of the Construction Stage

There are a number of impacts that may arise during the construction phase and which are subject to assessment in the relevant chapters of the EIAR and related application documentation. This list is non-exhaustive but covers the major issues to be considered in the assessment of potential impacts of the development:

- Construction methods – duration and phasing;
- Construction traffic, parking and site working hours;
- Health and Safety issues;
- Noise & Vibration due to construction work;
- Air quality (principally dust);
- Construction waste management (see separate standalone report which accompanies this application).

### **Construction Methods**

The construction methodology that will be utilised on the site will have three main attributes to minimise the impact of the construction phase:

- Phasing of construction;
- Efficiency;
- Minimisation of waste generated;

### **Construction Traffic, Parking and Site Working Hours**

The CEMP addresses these issues in greater detail and considers that the works associated with the proposed development will develop additional traffic on the public road network associated with the removal of excavated material and the delivery of new materials and concrete trucks, focused on Golf Lane given the proposed site access shall be from the existing roadway.

It is proposed that standard construction working hours will apply, between the hours of 07:00 and 19:00 Monday to Friday, and 08:00 to 17:00 on Saturday, with no work on Sunday or Bank Holidays. Onsite deliveries will be sufficiently planned to avoid high volume periods. There may be occasions where it is necessary to make certain deliveries outside these times, for example, where large loads are limited to road usage outside peak times.

### **Health and Safety Issues**

The proposed development will comply with all relevant Health and Safety legislation and best practice during the construction of the project. Where possible potential risks have been omitted from the design so that the impact on the construction phase is reduced.

### **Noise and Vibration due to Construction Work**

The potential impacts associated with noise and vibration due to construction work, are addressed in Chapter 10 Noise & Vibration. The CEMP includes measures to monitor, reduce and eliminate where possible the noise and vibration levels.

### **Air Quality and Climate**

The potential impacts associated with air quality due to construction work are addressed in Chapter 9 Air Quality and Climate. The CEMP includes dust and dirt monitoring and mitigation measures, and complaints procedures to be taken should they be necessary.

### **Construction Waste Management**

Standalone Construction Waste Management and Operational Phase Waste Management Plans prepared by AWN for the proposed development are included with this application and have informed the relevant assessments included in this EIAR. The purpose of both reports is to ensure the best practice is followed in terms of waste and

environmental management during the construction and operational phases of the proposed development, and to ensure adverse impacts on the receiving environment – including local residents - are minimised. The plans aim to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, where possible. They also provide guidance on the appropriate collection and transport of waste from the site to prevent issues associated with litter or more serious environmental pollution (such as contamination of soil and/or water).

### **2.7.3 Description of the Operation Stage of the Project**

Pursuant to the EIA Directive, an EIAR is required to set out a description of the project processes, activities, materials and natural resources utilised; and the activities, materials and natural resources and the effects, residues and emissions anticipated by the operation of the project.

The proposed development is primarily a residential development, with minor elements of commercial use including a gym, childcare facility, and local shop. The primary direct likely significant environmental effects will arise during the construction stage. As a result, post-construction, the operation of the proposed development is therefore relatively benign and not likely to give rise to any significant additional impacts in terms of activities, materials or natural resources used or effects, residues or emissions which are likely to have a significant impact on population and human health, biodiversity, soils, water, air, climate, or landscape. This is further outlined in subsequent chapters of this EIAR.

The primary likely and significant environmental impacts of the operation of the proposed development are fully addressed in the EIAR document.

The proposed development also has the potential for cumulative, secondary and indirect impacts, particularly with respect to such topics as traffic. Each chapter within this EIAR addresses the cumulative, secondary and indirect impacts which the development may have. On the basis of the assessment carried out as part of this EIAR, it is considered that all cumulative secondary and indirect impacts are unlikely to be significant; and where appropriate, have been addressed in the content of this EIAR document.

### **2.7.5 Description of Secondary and Off-Site Developments**

No significant secondary enabling development is necessary to facilitate the proposed development. The planning application includes details of the necessary infrastructure works, which are required to facilitate this development. These works are assessed within this EIAR, and are minor.

## **2.8 CUMULATIVE IMPACTS**

Each Chapter of the EIAR includes a cumulative impact assessment of the proposed development with other existing, permitted, and planning projects in the immediate area. The potential cumulative impacts primarily relate to traffic, dust, noise and other nuisances from the construction of the development, with other planned or existing projects, and each of the following EIAR chapters has regard to these in the assessment and mitigation measures proposed.

## **2.9 MITIGATION MEASURES**

Having regard to the details of the construction stage of development, as described above, the following mitigation measures are considered relevant to Chapter 2- Project Description and Alternatives. Each individual chapter deals with specific aspects of the proposed development and includes mitigation and monitoring measures where considered appropriate.

**PD&AE CONST 1:** The Construction and Environmental Management Plan will be implemented during construction of the development. It will remain a live document and may be updated as required. This Plan will reduce the impacts of the construction phase on local residents and ensure the local road network is not adversely affected during the course of the construction project, while methods such as those outlined in the pollution control section shall be implemented to mitigate any potential pollution events.

**PD&AE CONST 2:** A Construction Waste Management Plan and Operational Waste Management Plan have been prepared in respect of the proposed development by AWN and these will be implemented throughout construction and operation of the development. These Waste Management Plans meet the requirements of the Best Practice Guidelines for the Preparation of Waste Management Plans for Construction Projects.

## 2.10 CONCLUSION

This chapter of the EIAR has provided a description of the development proposal and outlined the reasonable alternatives considered by the developer.

In summary, the proposed development comprises a residential development of 482 no. units (all apartments), along with ancillary residential amenities, and provision of a childcare facility, gym, and local shop across 7 no. blocks, ranging in height between 4 and 22 storeys, on lands zoned for residential development in Dún Laoghaire-Rathdown County Development Plan 2016-2022, at Golf Lane, Carrickmines, Dublin 18

## 2.11 REFERENCES

- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, August 2018
- Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports, EPA, 2017
- Environmental Impact Assessment of Projects – Guidance on the Preparation of the Environmental Impact Assessment Report (2017) – European Commission
- Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment Guidelines for Regional Authorities and Planning Authorities DOELG, 2004
- Authorities Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems - Key Issues Consultation Paper, Department of Environment, Community and Local Government, 2017
- Circular letter PL 1/2017 - Advice on Administrative Provisions in Advance of Transposition (2017)
- The requirements of Part X of the Planning Acts, and Part 10 of the Planning Regulations
- National Planning Framework 2018
- Building Height Guidelines 2018
- Apartment Guidelines 2018
- Dún Laoghaire-Rathdown County Development Plan 2016-2022.
- Ballyogan and Environs Local Area Plan 2019-2025